

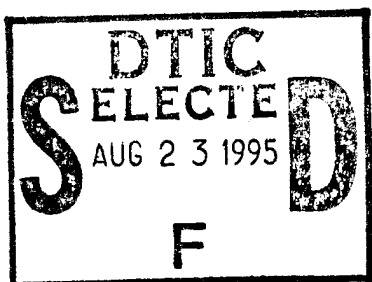
NAVAL WAR COLLEGE
Newport, R.I.

THE IMPACT OF OFFENSIVE ECONOMIC WARFARE
ON THE OPERATIONAL COMMANDER

by

Lois H. Gruendl

Commander, U.S. Navy



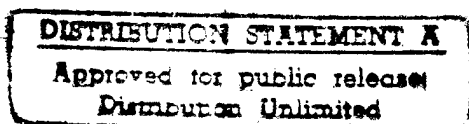
A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: Lois H. Gruendl

16 June 1995

Paper directed by
Captain D. Watson, U.S. Navy
Chairman, Department of Operations



Faculty Advisor

Date

19950822 134

UNCLAS

Security Classification This Page

REPORT DOCUMENTATION PAGE

1. Report Security Classification: UNCLASSIFIED			
2. Security Classification Authority:			
3. Declassification/Downgrading Schedule:			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: Joint Military Operations Department			
6. Office Symbol: 1C		7. Address: Naval War College, 686 Cushing Rd Newport, RI 02841-5010	
8. Title (Include Security Classification): The Impact of Offensive Economic Warfare on the Operational Commander UNCLAS			
9. Personal Authors: CDR Lois H. Gruendl, USA			
10. Type of Report: Final		11. Date of Report: 16 June 1995	
12. Page Count: 17 plus bibliography			
13. Supplementary Notation: A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Joint Military Operations Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.			
14. Ten key words that relate to your paper: Economic warfare, sanctions, embargoes, information warfare, MEZ, international law			
15. Abstract: Economic warfare has been practiced for centuries yet never really studied in depth. As economic well being becomes more critical to global national interests it is expected that aggressive economic actions could more easily escalate into armed conflict. It is critical that the operational commander understands the theory of economic warfare as both an enforcer of government policy and as a practitioner.			
16. Distribution / Availability of Abstract:	Unclassified X	Same As Rpt	DTIC Users
18. Abstract Security Classification: <i>Unclassified</i>			
19. Name of Responsible Individual: Chairman, Joint Military Operations Department			
20. Telephone: (401) 841-3414/4120		21. Office Symbol: 1C	

Security Classification of This Page UNCLAS

ABSTRACT

Economic warfare has been practiced for centuries yet never really studied in depth. As economic well being becomes more critical to global national interests it is expected that aggressive economic actions could more easily escalate into armed conflict. A theory of offensive economic warfare has been developed to demonstrate a spectrum of possible actions ranging from low intensity, high frequency of use to low frequency, high intensity acts. It is critical that the operational commander understands the theory of economic warfare as both an enforcer of government policy and as a practitioner, particularly since history has shown that economic warfare will most likely be used in any long term conflict. Further development of doctrine, theory and international law is required to support the most effective use of military assets in an economic warfare scenario.

CHAPTER I

INTRODUCTION

The history of economic warfare as a form of waging war dates back at least as early as the fourth century B.C. when Thucydides chronicled the saga of the Peloponnesian War, yet its importance in strategic studies dates back less than a century. The advent of World War II finally "legitimized" the concept as demonstrated by Great Britain establishing a Ministry for Economic Warfare and the United States, similarly, a Board of Economic Warfare. However, since World War II, lessons learned from the use of economic warfare have been largely forgotten and any further development of its application has been allowed to languish. The purpose of this paper is to propose an update to the theory of offensive economic warfare and demonstrate its continued utility to the operational commander.

CHAPTER II

OFFENSIVE ECONOMIC WARFARE THEN AND NOW

The standard definition of offensive economic warfare dating from World War II encompasses diplomatic, economic, financial, and military means designed to deprive an antagonist of the resources required to instigate or prolong a conflict.¹ In the past, most conflicts in history, including World War II, centered upon territorial disputes which often had a underlying nationalistic edge. Today, however, as the global economic community contains more developed economies, a greater portion of the world is less inclined to invade each other for nationalistic conquest. It is therefore quite conceivable that the focus on economic well being as a vital interest may one day dwarf protection or expansion of the homeland as the most realistic security concern. In which case, aggressive acts designed to harm a nation's economy could well be considered an act of warfare. Given such a potential trend, it would be useful to expand the definition of offensive economic warfare and explore its importance to the operational commander as both a concept and in practice.

A savvy operational commander will want to know all U.S. offensive economic warfare actions ongoing in his area of responsibility. First, because the art of waging economic

¹ Paul Einzig, Economic Warfare (London: Macmillan and Company, Ltd, 1940), pp. 2-3.

warfare is imprecise and unpredictable. Diplomatic actions resulting in an aggressive stance to another nation's economic well being may actually serve as a precursor or catalyst to future military conflict. This is particularly true if the military is called upon to enforce the action. Secondly, economic war prosecution can run concurrently with conventional battlefield action and thus vie for the application of military assets. Those engaged in waging war need to know where best to allocate resources in order to maximize their effectiveness. Finally, the imposition of economic conditions as a part of war termination may prolong the conflict long after the opposing factions lay down their military hardware.

The spectrum of offensive economic warfare, as shown in Figure 1, ranges from diplomatic gestures designed to express disapproval of another nation's actions to engagement in nuclear war. At the low end of the spectrum, these actions will rarely develop into armed conflict and may actually be very passive in nature, depending on the scope of the action and the nation to which they are applied. Yet, as one moves further down the scale, it is easier to pick up momentum and move into armed conflict, especially if the military is involved in intercept operations to enforce an embargo. Each subsequent step along the spectrum continues to heighten the hostility until finally, the differentiation between armed conflict and war becomes largely a legal concept. And,

SPECTRUM OF OFFENSIVE ECONOMIC WARFARE

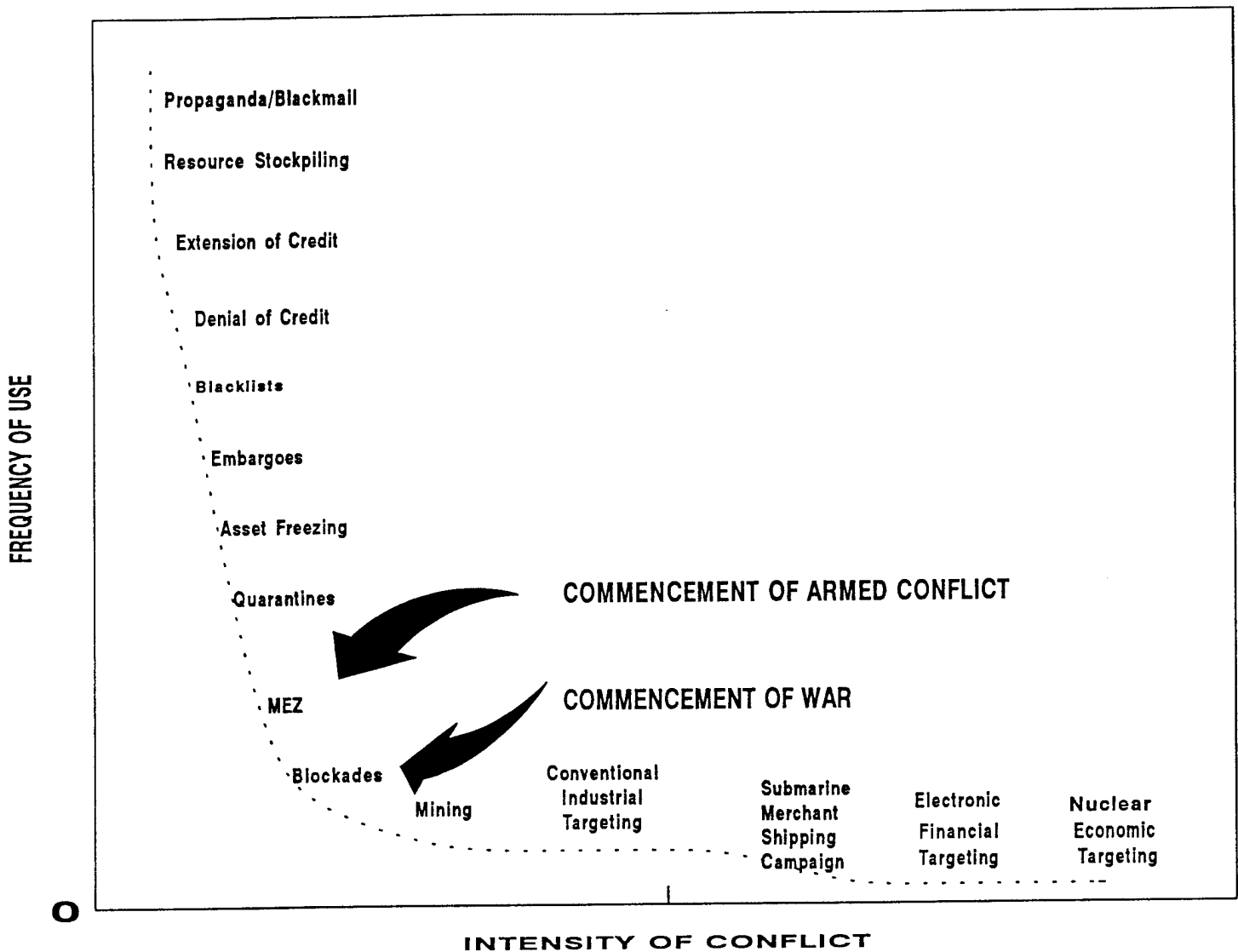


FIGURE 1

although the debate over the legality of establishing Maritime Exclusion Zones (MEZ) is still being wrestled with by the international law community, a blockade and all subsequent standard combat actions are most definitely recognized as acts of war (electronic financial targeting as an act of war is discussed further below).

CHAPTER III

BEFORE ARMED CONFLICT

The lowest intensity of economic warfare is the use of propaganda or "diplomatic" blackmail intended to coerce behavior without any expectation of escalation into armed hostilities. Propagandic actions are designed to showcase one's own economic stability and the instability of an antagonist's² and would be considered a fairly benign action. More intimidating, due the potential loss of trade revenues, is an action such as the threat to withdraw designation as a most favored nation in order to prompt human rights reform.

Next on the spectrum is resource stockpiling which can take many forms. If a country is a major exporter of an important raw material, it can control the amount on the open market. Another aspect of this concept would be buying up a key raw material just to preclude its availability to a third party. A hybrid defensive/offensive gesture would be the United States buying stockpiles of Russian fissionable material to prevent its sale to questionable nations. Whether any of these actions developed into a more conventional armed conflict would depend on the raw material's strategic value to the country or countries being denied possession of it.

Extension of credit for both weapons and raw materials has been used extensively preceding and during armed conflict.

² Einzig, p. 4.

In World War II, the American Lend-Lease program gave invaluable assistance to Great Britain before the United States' actual entry into the war. As another example, the United States continuously provided significant assistance to Israel and the Soviets provided extensive credit sales to myriad countries during the cold war. While the extension of credit has not usually been a catalyst for armed conflict, both it and the denial of credit demonstrate further progression along the spectrum of economic conflict.

The next phase, imposition of blacklists, marks the rapid descent into more outwardly aggressive actions. Blacklists draw neutral trading partners into the fray by trying to persuade them not to sell to the nation with which one is in conflict. During World Wars I and II, lists of neutral businesses which conducted business with Germany were blacklisted by Great Britain. In an even more sweeping gesture lasting several decades, the Arab nations blacklisted firms doing business in Israel. Those businesses not complying with the intended agenda were subsequently boycotted as part of a series of actions designed to undermine the development of Israel's economy. Although many blacklists and boycotts are state-sponsored, special interest groups also use them to target specific nations engaged in questionable activities such as human rights violations.

Embargoes, the next item on the spectrum, are a form of trade restriction which can target either a nation's imports,

exports, or both. Whenever the term economic sanctions is used, it usually implies some form of embargo, but there can also be other financial aspects to it such as asset freezing. Sanctions (or embargoes) have been the focus of much debate both from an effectiveness and a morality standpoint.

Although the operational commander is not concerned from a political standpoint as to how effective the embargo is, he is concerned about the regional instability resulting from it--including both its enforcibility requirements as well as the economic consequences stemming from it. A maritime quarantine is a highly stylized form of embargo, targeting very specific material and requiring military enforcement. Trade sanctions can cause war, prolong cold wars and prevent war termination.

One example of trade restrictions catapulting states into armed conflict was the Megarian Decree, imposed in 432 B.C. by the Athenians against the colony of Megara. As retaliation for Megara supporting Corinth's naval buildup and thus helping to create a potential military threat to Athens, the Athenians banned Megara from trading at any ports in the Aegean Sea. The harshness of the decree was one of the underlying causes of the resultant Peloponnesian War. Over two millenia later, the United States' ban on selling oil to Japan resulted in the attack on Pearl Harbor and the United States' entry into World War II. Both cases demonstrate that aggressive, "offensive" economic action can create sudden, yet long lasting military conflicts.

Trade embargoes can also be sweeping measures that help keep relations between nations festering for decades or crippling actions which prevent successful war termination. The United States' embargoes against North Korea and Cuba have been part of an lengthy economic offensive against communism. Only recently has there been an easing of the 45-year North Korean embargo in an attempt to encourage North Korean compliance with nuclear non-proliferation treaty requirements.³ Whether it similarly eases military tensions remains to be seen.

The best example of offensive economic sanctions prolonging the war termination process have been the United Nations imposed measures against Iraq in the aftermath of the armed hostilities in the Persian Gulf War. Four years after the fighting stopped, American military assets are still required to help enforce sanctions designed to eliminate Iraqi weapons of mass destruction; force acceptance of the Iraqi-Kuwaiti border; cease human rights violations against the Shi'a and Kurds; and make reparations payments for having started the war.⁴ Saddam Hussein's intransigence in complying with the sanctions have brought his country to the brink of

³ Steven Greenhouse, "U.S. Eases Trade Limits on North Korea for First Time Since 1950," The New York Times, 21 January 1995, p. A3:1.

⁴ George Joffe, "Iraq--The Sanctions Continue," Jane's Intelligence Review, July 1994, p. 315.

economic ruin, resulting in rampant, regime-sanctioned crime and worsening medical conditions. The UN has characterized the current Iraqi plight of "massive deprivation, chronic hunger, [and] endemic malnutrition for the vast majority of the population . . . [as] commonly recognized prefamine indicators."⁵ A worst case scenario would be the re-entry of American troops to help prevent the splintering apart of the Iraqi nation--a highly undesirable condition from both a U.S. and Middle East perspective.

⁵ Ibid., p. 315.

CHAPTER IV

ARMED CONFLICT AND BEYOND

Up until this point, the operational commander has been concerned with reviewing the actions of his political leadership and how they might impact upon him. But at this point on the spectrum, he could well be asked to divide his forces to prosecute both the economic and conventional aspects of a war simultaneously, particularly in a long term conflict. One problem with that scenario is that the United States has not successfully engaged in military economic warfare since World War II. Should its next major regional conflict be of lengthy duration, the operational commander would need to know how to mesh the requirements for destroying both operational and industrial centers of gravity. Even though he is familiar with the concepts of Maritime Exclusion Zones, blockades, mining and bombs/torpedoes on target, their usage could be vastly different in an economic warfare environment.

Military economic warfare is a cumulative strategy which depends on accurate prewar intelligence to identify strategic raw materials, sources of procurement, available stockpiles, rates of usage, potential substitutes, and key industrial sites as well as a steady application of assets to ensure their interdiction or destruction. Failure to receive accurate intelligence, apply a consistent measure of force and verify successful target destruction or interdiction can

result in a considerable waste of assets.⁶ This was particularly true in the World War II industrial bombing campaign which suffered from lack of good intelligence, accuracy of weaponry and consistency of purpose. Furthermore, the more recent long term conflicts in Korea and Vietnam also failed to hone economic warfare aviation skills in targeting or weapons delivery. The reason for this is because the war industrial complexes were essentially located outside the theater of operations in other communist countries. Blockade actions were also of limited utility since most supplies were sent covertly via rail or truck at night.

Some of the other major problems facing the maritime operational commander are the low profile economic warfare has in current doctrine, as well as several unresolved international law issues. Two recurring themes in Naval War College classroom exercises are that the students always establish Maritime Exclusion Zones even though war zones are illegal. They also consistently forget about the availability of mine warfare as an offensive measure. Further operational quandaries include developing successful merchant shipping interdiction for a large scale conflict conducted over considerable time. The volume of merchant traffic continues to rise as does reflagging of vessels. The U.S. might have to instigate an extensive visit and search program during a long

⁶ Allan Rehm, Intelligence for the Conduct of an Economic Campaign, CRM 90-12 (Alexandria, VA: Center for Naval Analyses, 1990), p. 1.

term conflict. Furthermore, it has to resolve whether to use submarine and air operations to sink commercial shipping in wartime even if their usage is in violation of the London Protocol of 1936. In a 3-day symposium conducted by the Naval War College in 1990, the implied consensus appeared to be that targeting merchant vessels with weapons which did not allow for the safe recovery of the passengers and crew would be contingent on: 1) the length and severity of the conflict; 2) the belligerents involved; 3) the threat to the platform which had targeted the merchant vessel; and 4) emerging international law.⁷

None of these issues can be resolved quickly. They require development of supporting military economic warfare theory and some degree of consensus from the international community. Although economic warfare prosecution will continue to compete with conventional military warfare for intelligence, doctrine and assets, its theory must be developed as acceptable war practice so that the operational commander will have the right tools and knows how to use them in a long term conflict. One sure way to make his job easier would be to fast forward economic warfare theory into the next emerging area of warfare theory--the art of information warfare.

⁷ Richard J. Grunawalt, ed., International Law Studies 1993: Targeting Enemy Merchant Shipping, (Newport, RI: Naval War College, 1993), pp. ix-xiv.

CHAPTER V

THE WARRIOR HACKER

Although the art of information warfare is still in its infancy, now is the time to investigate the use of electronic means to prosecute enemy economic targets in a long term conflict. The cost of development would be relatively small against a significant payoff--the severe undermining of the enemy's economy. Even more importantly, from the operational commander's viewpoint, it would not deprive him of conventional warfare assets.

The purpose of such a weapon would go far beyond the current practice of freezing a belligerent's financial assets held in the United States. It would be designed to strike within the enemy's financial institutions to cause disruption of his financial system or even "capture" of his assets as wartime prizes. The intention of this type of action would be to shorten the duration of the conflict and to drive the belligerent to the bargaining table for war termination terms. The extent of its usage and impact would be orchestrated to be proportional to the particular ongoing conflict, but the assumption is that such an invasive act could only be used subsequent to a declaration of war.

The feasibility of developing such a weapon for military use is quite high. "A computer--like a spy--can be 'turned' to betray or doublecross its rightful operator. Turning a spy

is an insightful psychological exercise: turning a computer is a challenging technological exercise."⁸ Hackers have already penetrated significant computer systems including those belonging to educational, government research, military and financial institutions. The full extent of these activities is unknown as many organizations do not want to publicize their vulnerabilities. What is known is that the startup costs are cheap and the initial skills are easy to develop.

If the military were to develop this type of expertise, it would have to be as closely guarded as its nuclear weapons technology and its special forces' capabilities. Possessing the ability to disrupt such activities as the \$600 billion-a-day foreign exchange markets⁹ could have truly devastating results in the wrong hands. Publicizing the ability to wreak this type of havoc would lessen its potential impact and hasten the development of countermeasures to prevent its usage. Depending on the "lethality" of such a conceptual weapon, electronic financial targeting might even be pushed to the edge of the economic warfare spectrum with strategic nuclear weapons. Until such time, nuclear weapons will maintain its position as the highest intensity, but least

⁸ Peter E. Sakkas, "Espionage and Sabotage in the Computer World," International Journal of Intelligence and Counterintelligence, p. 155.

⁹ Ibid., p. 160.

used form of economic warfare where economic nuclear targets have evolved into secondary "reserve" targets.¹⁰

¹⁰Benjamin S. Lambeth and Kevin N. Lewis, Economic Targeting in Modern Warfare, P-6735, (Santa Monica, CA: Rand, 1982), p. 23.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

Clearly not every act of diplomatic posturing or economic sanction will lead to conventional war. The United States' threat to impose \$1 billion in trade tariff sanctions against the Chinese for music copyright infringements did not plunge it into armed conflict.¹¹ However, it was aggressive enough to get the Chinese to try to comply with U.S. demands to stop the piracy. On the other hand, a prophetic newspaper headline in early December, 1990 stating "The Big Squeeze: Why the Sanctions on Iraq Will Work" only demonstrates that like all artforms, economic warfare is never precise. While the operational commander might not be interested in why the economic measures weren't effective, the relevant issue is how he was impacted in that situation or how he might be impacted by the United States' most recent employment of sanctions on 30 April 1995 which bans all trade with Iran.

As the spectrum of economic conflict gets more aggressive, the military is more likely to be an active participant. To be a skilled participant, the operational commander must understand economic warfare in his dual roles as an enforcer of government policy and as a potential practitioner, particularly in a long term conflict. Without the benefit of

¹¹ "U.S. Warns 8 Nations on Intellectual Property Laws." The Washington Post, 30 April 1995, p. A9:1-4.

real-time operations to fall back upon, several actions must be taken to ensure his skills are developed and his operational needs met. Intelligence gathering must continually target economic activities, particularly in high risk countries such as China, the former Soviet Union and Korea. More attention must be devoted to operational art theory, military doctrine and international law as they relate to successfully winning a long term conflict which utilizes economic warfare in conjunction with conventional warfare. Finally, as new weaponry and warfare theory such as information warfare are developed, their utility in waging economic warfare should be examined.

BIBLIOGRAPHY

- Alford, Neil H. International Law Studies 1963: Modern Economic Warfare (Law and the Naval Participant). Newport, RI: Naval War College, 1963.
- Andrews, Vincent J. "Maritime Interception Operations." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1992.
- Bostek, James E. "Sanctions: Intent of the 'Tool' for the Operational Commander." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1992.
- Devroy, Ann. "President Will Ban All Trade with Iran." The Washington Post, 1 May 1995, p. A1, A12.
- Doughty, Robert A. and Harold E. Raugh, Jr. "Embargoes in Historical Perspective." Parameters, Spring 1991, pp. 21-30.
- Einzig, Paul. Economic Warfare. London: MacMillan and Company, Ltd., 1940.
- Elliott, Kimberly, Gary Hufbauer, and Jeffrey Schott. "The Big Squeeze: Why the Sanctions on Iraq Will Work." The Washington Post, 9 December 1990, pp. K1-K2.
- Fisher, Roger. "Getting to 'Yes' with Saddam: How Words Can Win." The Washington Post, 9 December 1990, pp. K1-K2.
- Forland, Tor Egil. "The History of Economic Warfare: International Law, Effectiveness, Strategies." Journal of Peace Research, 2 May 1993, pp. 151-162.
- Giraitis, David M. "Quarantines and the U.S. Coast Guard Option." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1990.
- Gordon, David L. and Royden Dangerfield. The Hidden Weapon: The Story of Economic Warfare. New York: Harper & Brothers Publishers, 1947.
- Greenhouse, Steven. "U.S. Eases Trade Limits on North Korea for First Time Since 1950." The New York Times, 21 January 1995, p. A3:1-4.
- Greenhouse, Steven. "U.S. View of Sanctions: Turn Up Heat Half Way." The New York Times, 3 July 1994, p. A12:3-4.

- Grunwalt, Richard J., ed. International Law Studies 1993: Targeting Enemy Merchant Shipping. Newport, RI: Naval War College, 1993.
- Hammond, N. G. L. A History of Greece to 322 B.C. Oxford: Clarendon Press, 1991.
- Joffe, George. "Iraq--The Sanctions Continue." Jane's Intelligence Review, July 1994, pp. 314-316.
- Keener, Keith B. "The Theater Commander's Role in Economic Sanctions." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1992.
- Lambeth, Benjamin S. and Kevin N. Lewis. Economic Targeting in Modern Warfare. The Rand Corporation, no. 6735. Santa Monica: July 1982.
- Madsen, Wayne. "Intelligence Agency Threats to Computer Security." International Journal of Intelligence and Counterintelligence, Winter 1993, pp. 413-488.
- Maynes, Charles William. "To the Brink in the Gulf, Again." The New York Times, 11 October 1994, p. A21:2-5.
- Offer, Avner. "Morality and Admiralty: 'Jacky' Fisher, Economic Warfare and the Laws of War." Journal of Contemporary History, January 1988, pp. 99-118.
- Olson, Jonathan J. "Naval Interdiction Considerations in the Use of Limited Naval Force in Operations Short of War." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1993.
- Rehm, Allan. Intelligence for the Conduct of an Economic Campaign. CRM 90-12. Alexandria, VA: Center for Naval Analyses, 1990.
- Rode, Reinhard and Hanns-D. Jacobsen, ed. Economic Warfare or Detente. Boulder: Westview Press, 1985.
- Sakkas, Peter E. "Espionage and Sabotage in the Computer World." International Journal of Intelligence and Counterintelligence, Summer 1991, pp. 155-202.
- Snoyer, Robert S. and Glenn A. Fischer, ed. Managing Microcomputer Security. Homewood, IL: Chantico Publishing Company, Inc,
- "U.S. Warns 8 Nations on Intellectual Property Laws." The Washington Post, 30 April 1995, p. A9:1-4.